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Abstract Submission Form

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1st	5. Novel Techniques (Sensing and monitoring)
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An Information Management System for a Spent Nuclear Fuel Interim Storage Facility*

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As more countries consider increased use of nuclear energy, interim storage of spent nuclear fuel (SNF) will continue to increase, and as countries continue to postpone decisions about direct disposal or recycling of SNF, interim storage will be the *de facto* solution for SNF management for decades to come. Inventories of SNF are projected to increase steadily over the next few decades, with estimated total worldwide SNF stored in either pools or interim dry-storage facilities reaching 350,000 tHM (tonnes of heavy metal) by 2020. Safety, security, and safeguards concerns for such interim storage facilities will become increasingly important. SNF storage facilities must collect a variety of information to monitor operations, site security, and compliance with safeguards requirements. Such information is relevant, not only to a facility's operator, but to a variety of stakeholders (regulators, municipalities, emergency responders, and the general public). We describe the preliminary design of an information management system for a interim SNF storage facility that can provide a system for (1) secured and authenticated data collection, (2) data analysis capability, (3) secure dissemination of relevant information to appropriate stakeholders, and (4) increased public confidence and support of the facility licensing and operations through increased transparency.

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